

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) An flexible, voltage driven, display comprising an apparatus for compensating for variations in luminescence and/or color in ~~a voltage driven, the~~ flexible display, said variations being associated with a bending of said flexible display, said apparatus for compensating comprising:

measurement means for measuring a cell gap at a part of the flexible display, and adjustment means for adjusting voltages, which are applied to said part of said flexible display, depending on the measured cell gap, characterized in that the measurement means are set to repeatedly measure the cell gap, and the adjustment means are set to repeatedly adjust the applied voltages in response to the measured cell gap, and

wherein the flexible display is an active-matrix display comprising a plurality of pixels and a plurality of conductors, and wherein the measurement means are set to measure the cell gap at a part of the display by measuring the time which is required for charging a pixel when a constant voltage is supplied on an associated conductor.

2. (Currently amended) The flexible display~~An apparatus~~ according to claim 1, wherein a frequency of repetition of measurement and a frequency of repetition of adjustment are constant.

3. (Currently amended) The flexible display~~An apparatus~~ according to claim 1, wherein at least one of a frequency of repetition of measurement and a frequency of repetition of adjustment are controlled as a function of user settings, operation conditions or both.

4. (Currently amended) The flexible display~~An apparatus~~ according to claim 1, wherein the adjustment means are effected only when a change in cell gap is detected.

5. (Currently amended) The flexible display~~An apparatus~~ according to claim 4, wherein the adjustment means are effected only when a change in cell gap above a certain threshold is detected.

6. (Currently amended) The flexible display~~An apparatus~~ according to claim 1, wherein the flexible display is flexible in one direction only, and wherein the measurement means are distributed along the axis of flexibility.

7. (Currently amended) The flexible display~~An apparatus~~ according claim 1, wherein the flexible display is flexible in two directions, and wherein the measurement means are distributed throughout the flexible display.

8. (Currently amended) The flexible display~~An apparatus~~ according to claim 1, wherein at least one measurement means is arranged within at least one lithographic spacer.

9. (Currently amended) The flexible display~~An apparatus~~ according to claim 1, wherein the number and arrangement of the measurement means have been optimized given the flexibility of the display.

10-13 (Canceled)

14. (Currently Amended) A portable apparatus comprising a flexible display according to claim ~~11~~1.

15. (Original) A portable apparatus according to claim 14, wherein the portable apparatus is one of an electronic paper, a personal digital assistant (PDA), a mobile telephone, a set of wearable electronics, a portable computer, an electronic calendar, an electronic book, a television or a video game control.

16. (Currently Amended) A method for compensating for variations in luminescence and/or color in a voltage-driven, flexible active matrix display comprising a plurality of pixels and a plurality of conductors, said variations being associated with a bending of said flexible display, wherein the method comprises the steps of:

measuring a cell gap at a part of the flexible display, and

adjusting voltages, which are applied to said part of the flexible display, in response to the measured cell gap,

characterized in that the steps are performed repeatedly during operation of the flexible display and measuring the cell gap at a part of the display by measuring the time which is required for charging a pixel when a constant voltage is supplied on an associated conductor.

17. (Original) A method according to claim 16, wherein the frequency of repetition of measurement and adjustment is constant.

18. (Original) A method according to claim 16, wherein at least one of a frequency of repetition of measurement and a frequency of repetition of adjustment are controlled as a function of user settings, operation conditions or both.

19. (Original) A method according to claim 16, wherein said step of adjusting is performed only when a change in cell gap is detected.

20. (Original) A method according to claim 19, wherein said step of adjusting is performed only when a change in cell gap above a certain threshold is detected.

21. (New) A flexible, voltage driven, display comprising an apparatus for compensating for variations in luminescence and/or color in the flexible display, said variations being associated with a bending of said flexible display, said apparatus for compensating comprising:

measurement means for measuring a cell gap at a part of the flexible display, and
adjustment means for adjusting voltages, which are applied to said part of said flexible display, depending on the measured cell gap,

characterized in that the measurement means are set to repeatedly measure the cell gap, and the adjustment means are set to repeatedly adjust the applied voltages in response to the measured cell gap, and wherein the flexible display is a passive-matrix display, and wherein the measurement means are set to deduce the cell gap by supplying an AC-signal to a row conductor, measuring the amplitude of the signal on the column conductors and comparing it with the amplitude of the signal which is supplied on an associated conductor.

22. (New) The flexible display according to claim 21, wherein a frequency of repetition of measurement and a frequency of repetition of adjustment are constant.

23. (New) The flexible display according to claim 21, wherein at least one of a frequency of repetition of measurement and a frequency of repetition of adjustment are controlled as a function of user settings, operation conditions or both.

24. (New) The flexible display according to claim 21, wherein the adjustment means are effected only when a change in cell gap is detected.

25. (New) The flexible display according to claim 24, wherein the adjustment means are effected only when a change in cell gap above a certain threshold is detected.

26. (New) The flexible display according to claim 21, wherein the flexible display is flexible in one direction only, and wherein the measurement means are distributed along the axis of flexibility.

27. (New) The flexible display according claim 21, wherein the flexible display is flexible in two directions, and wherein the measurement means are distributed throughout the flexible display.

28. (New) The flexible display according to claim 21, wherein at least one measurement means is arranged within at least one lithographic spacer.

29. (New) The flexible display according to claim 21, wherein the number and arrangement of the measurement means have been optimized given the flexibility of the display.

30. (New) A portable apparatus comprising a flexible display according to claim 21.

31. (New) A portable apparatus according to claim 30, wherein the portable apparatus is one of an electronic paper, a personal digital assistant (PDA), a mobile telephone, a set of wearable electronics, a portable computer, an electronic calendar, an electronic book, a television or a video game control.

32. (New) A method for compensating for variations in luminescence and/or color in a voltage-driven, flexible passive-matrix display comprising a plurality of pixels and a plurality of conductors, said variations being associated with a bending of said flexible display, wherein the method comprises the steps of:

measuring a cell gap at a part of the flexible display, and

adjusting voltages, which are applied to said part of the flexible display, in response to the measured cell gap,

characterized in that the steps are performed repeatedly during operation of the flexible display wherein the cell gap is deduced by supplying an AC-signal to a row conductor, measuring the amplitude of the signal on the column conductors and comparing it with the amplitude of the signal which is supplied on an associated conductor.

33. (New) A method according to claim 32, wherein the frequency of repetition of measurement and adjustment is constant.

34. (New) A method according to claim 33, wherein at least one of a frequency of repetition of measurement and a frequency of repetition of adjustment are controlled as a function of user settings, operation conditions or both.

35. (New) A method according to claim 33, wherein said step of adjusting is performed only when a change in cell gap is detected.

36. (New) A method according to claim 35, wherein said step of adjusting is performed only when a change in cell gap above a certain threshold is detected.